

## IN THE CLAIMS

1. (Currently amended) A system for processing signals, comprising:  
a multiplexer, the multiplexer having a first interface to a plurality of broadband signal inputs and a second interface to a bus, the multiplexer multiplexing signals received at each of the broadband signal inputs onto the bus according to a frequency allocation scheme that associates ~~associating~~ each of the broadband signal inputs with an assigned frequency block; and

~~at least a first receiver unit, the first receiver unit~~ a plurality of receivers in communication ~~communicating~~ with the bus for receiving and decoding the multiplexed broadband signal inputs for communication with a data network; wherein each of the receivers is capable of tuning to a frequency corresponding to a frequency block of the frequency allocation scheme.

2. (Canceled)

3. (Currently amended) The system of claim 2 21, wherein ~~the second receiver unit~~ at least one of the receivers is a backup receiver is capable of being activated by an activation control signal that is generated upon detection of a fault condition.

4. (Currently amended) The system of claim 3, wherein ~~each of the first receiver unit and the second receiver unit comprises a plurality of individual receiver modules, each of the individual receiver modules being tunable to a selected frequency, and the activation of the second~~ a backup receiver unit comprises tuning at least one of the backup individual receiver modules of the second receiver unit to an assigned a frequency for a corresponding to a failed one of the individual receiver modules in the first receiver.

5. (Currently amended) The system of claim ~~[[4]]~~ 1, wherein the broadband signal inputs comprise at least cable television modem signals.

6. (Original) The system of claim 1, wherein the data network comprises a connection to the Internet.

7. (Original) The system of claim 1, wherein the first interface comprises a plurality of converters capable of converting at least optical signals to electrical signals.

8. (Original) The system of claim 1, wherein the broadband signal inputs comprise at least one of Internet Protocol data, telephony data, and video data.

9. (Canceled)

10. (Original) The system of claim 1, wherein the bus comprises a single physical connection.

11. (Currently amended) A method for processing signals, comprising:

a) multiplexing, a plurality of broadband signal inputs received via a first interface ~~in a multiplexer unit~~ to a bus, the multiplexing being done according to a frequency allocation scheme that associates ~~associating~~ each of the broadband signal inputs with a an-associated frequency block; and

b) tuning at least one of a plurality of receivers that are coupled to and capable of receiving signals from the bus to a frequency that is included within one of the frequency blocks ~~decoding the multiplexed broadband signal inputs in first receiver unit communicating with the bus~~ for communication with a data network.

12. (Canceled)

13. (Currently amended) The method of claim ~~12~~ 11, further comprising a step of ~~d) c) tuning a receiver to the frequency of another receiver activating the second receiver unit~~ upon detection of a fault condition associated with the other receiver.

14. (Canceled)

15. (Currently amended) The method of claim ~~14~~ 11, wherein the broadband signal inputs comprise at least cable television modem signals.

16. (Original) The method of claim 11, wherein the data network comprises a connection to the Internet.

17. (Original) The method of claim 11, wherein the first interface comprises a plurality of converters capable of converting at least optical signals to electrical signals.

18. (Original) The method of claim 11, wherein the broadband signal inputs comprise at least one of Internet Protocol data, telephony data, and video data.

19. (Canceled)

20. (Currently amended) The method of claim ~~1~~ 11, wherein the bus comprises a single physical connection.

21. (New) The system of claim 1 wherein the receivers include a third interface for receiving an activation control signal and being operative to tune to a frequency according to the frequency allocation scheme when the activation control signal is received.

22. (New) The system of claim 1 wherein the bus passes digitized versions of the broadband inputs instead of assigned-frequency versions.